10/805,806

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=> s 60142-96-3/cn
L1
             0 60142-96-3/CN
=> s 60142-96-3/rn
             1 60142-96-3/RN
=> d
L2
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN
RN
    60142-96-3 REGISTRY
ED
    Entered STN: 16 Nov 1984
CN
    Cyclohexaneacetic acid, 1-(aminomethyl)- (CA INDEX NAME)
OTHER NAMES:
CN
     1-(Aminomethyl)cyclohexaneacetic acid
CN
    CI 945
CN
     Gabapen
CN
     Gabapentin
     Go 3450
CN
    GOE 2450
     GOE 3450
CN
CN
     Neurontin
MF
     C9 H17 N O2
CT
     COM
LC.
                  ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS,
     STN Files:
       BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM,
       DDFU, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH,
       IMSDRUGNEWS, IMSPATENTS, IMSPRODUCT, IMSRESEARCH, IPA, MEDLINE, MRCK*,
       MSDS-OHS, PHAR, PROMT, PROUSDDR, PS, RTECS*, SCISEARCH, SYNTHLINE,
       TOXCENTER, USAN, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources: EINECS**, WHO
         (**Enter CHEMLIST File for up-to-date regulatory information)
     CH2-NH2
       CH2-CO2H
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
            1890 REFERENCES IN FILE CA (1907 TO DATE)
              56 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            1901 REFERENCES IN FILE CAPLUS (1907 TO DATE)
=> filecaplus
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TOh 10/07/2008

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter

FILECAPLUS IS NOT A RECOGNIZED COMMAND

"HELP COMMANDS" at an arrow prompt (=>).

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SINCE FILE TOTAL ENTRY SESSION 8.07 8.28

FULL ESTIMATED COST

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http://www.cas.org/legal/infopolicy.html

=> s 60142-96-3 and tannic acid REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L4 1901 L3

1.5

8832 TANNIC 4623495 ACID 7178 TANNIC ACID (TANNIC(W)ACID) 5 L4 AND TANNIC ACID

=> s 15 and py<2003 22935557 PY<2003 L6 0 L5 AND PY<2003

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=> d 15 1-5 bibi abs hitstr
'BIBI' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'
The following are valid formats:
ABS ----- GI and AB
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APPS ----- AI, PRAI
BIB ----- AN, plus Bibliographic Data and PI table (default)
CAN ----- List of CA abstract numbers without answer numbers
CBIB ----- AN, plus Compressed Bibliographic Data
CLASS ----- IPC, NCL, ECLA, FTERM
DALL ----- ALL, delimited (end of each field identified)
DMAX ----- MAX, delimited for post-processing
FAM ----- AN, PI and PRAI in table, plus Patent Family data
FBIB ----- AN, BIB, plus Patent FAM
IND ----- Indexing data
IPC ----- International Patent Classifications
MAX ----- ALL, plus Patent FAM, RE
PATS ----- PI, SO
SAM ----- CC, SX, TI, ST, IT
SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
             SCAN must be entered on the same line as the DISPLAY,
             e.g., D SCAN or DISPLAY SCAN)
STD ---- BIB, CLASS
IABS ----- ABS, indented with text labels
IALL ----- ALL, indented with text labels
IBIB ----- BIB, indented with text labels
IMAX ----- MAX, indented with text labels
ISTD ----- STD, indented with text labels
OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels
SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations
HIT ----- Fields containing hit terms
HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)
             containing hit terms
HITRN ----- HIT RN and its text modification
HITSTR ----- HIT RN, its text modification, its CA index name, and
             its structure diagram
HITSEO ----- HIT RN, its text modification, its CA index name, its
            structure diagram, plus NTE and SEQ fields
FHITSTR ---- First HIT RN, its text modification, its CA index name, and
             its structure diagram
FHITSEQ ---- First HIT RN, its text modification, its CA index name, its
            structure diagram, plus NTE and SEQ fields
KWIC ----- Hit term plus 20 words on either side
OCC ----- Number of occurrence of hit term and field in which it occurs
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TOh 10/07/2008

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All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEO, FHITSEO, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number. ENTER DISPLAY FORMAT (BIB):end

=> d 15 1-5 ibib abs hitstr

L5 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1005830 CAPLUS

DOCUMENT NUMBER: 143.292591

TITLE: In process conversion method for preparing tannate tablet, capsule or other solid dosage forms

INVENTOR(S): Ware, Emily C.; Kiel, Jeffrey S.; Thomas, H. Greg; Ware, Brady Neal; Harned, George T.

PATENT ASSIGNEE(S):

SOURCE: U.S. Pat. Appl. Publ., 6 pp. CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT				KIN	D	DATE			APPL			NO.	DATE				
US 2005 WO 2005	0202	080		A1 A1		2005 2005			US 2 WO 2	005-	7885	4			0050	311	
W: RW:	CN, GE, LK, NO, SY, BW, AZ, EE, RO,	CO, GH, LR, NZ, TJ, GH, BY, ES, SE,	CR, GM, LS, OM, TM, GM, KG, FI,	CU, HR, LT, PG, TN, KE, KZ, FR, SK,	CZ, HU, LU, PH, TR, LS, MD, GB, TR,	AU, DE, ID, LV, PL, TT, MW, RU, GR, BF,	DK, IL, MA, PT, TZ, MZ, TJ, HU,	DM, IN, MD, RO, UA, NA, TM,	DZ, IS, MG, RU, UG, SD, AT, IS,	EC, JP, MK, SC, US, SL, BE, IT,	EE, KE, MN, SD, UZ, SZ, BG, LT,	EG, KG, MW, SE, VC, TZ, CH, LU,	ES, KP, MX, SG, VN, UG, CY, MC,	FI, KR, MZ, SK, YU, ZM, CZ, NL,	GB, KZ, NA, SL, ZA, ZW, DE, PL,	GD, LC, NI, SM, ZM, AM, DK, PT,	ZW

PRIORITY APPLN. INFO.:

US 2004-552519P P 20040312

AB The present invention relates generally to the field of tannate chemical and more specifically to methods for processing tannate tablets, capsules, or other solid dosage forms. The present invention provides a novel manufacturing process for the conversion of one or more active pharmaceutical ingredients ("API") into their tannate salt complexes while incorporating the complexes into a therapeutic solid-dosage form which also may include non-tannate APIs. The first step of this process is to create a tannic acid powder blend by combining the salt or free base form of one or more APIs with tannic acid. After the dry blend is thoroughly mixed, a pharmaceutically acceptable liquid is added, for example by spraying, onto the dry powder blend facilitating the tannate salt conversion process. The conversion product is then added to

addnl. dry powders thereby reducing the overall liquid content to a level

that is more typical of wet granulation processes.

IT 60142-96-3DP, Gabapentin, tannate complexes

RL: PNU (Preparation, unclassified); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)

(in-process conversion method for preparing tannate tablets or other solid dosage forms)

RN 60142-96-3 CAPLUS

CN Cyclohexaneacetic acid, 1-(aminomethyl)- (CA INDEX NAME)

L5 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:803929 CAPLUS

DOCUMENT NUMBER: 141:301482

TITLE: Phenolic acid salts of gabapentin in liquid and/or

semi-solid dosage forms and methods of use
INVENTOR(S): Kiel, Jeffrey S.; Thomas, H. Greg; Mani, Narasimhan

PATENT ASSIGNEE(S): Kiel Laboratories, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 6 pp.

CODEN: USXXCO DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.		KIN	D	DATE			APPL	ICAT	ION :	NO.			ATE	
US 200-	10192618	-			2004 2008			US 2	004-	8062	60			0040	
WO 200	1093867 1093867		A2		2004	1104		WO 2	004-	US78	72		2	0040	316
	AE, AG, CN, CO,	AL,	AM,	AT,	AU,	AZ,									
	GE, GH, LK, LR,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,
	NO, NZ, TJ, TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
RW	BW, GH, BY, KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
	ES, FI, SK, TR, TD, TG														
	3656 DE, FR,				2006	0301		EP 2	004-	7596	02		2	0040	316
PRIORITY API												1		0030	

AB The present invention relates to pharmaceutical compns. of gabapentin tannate, processes for production of those compns. and methods of use of those compns. The present invention provides a novel process for preparation of the

tannate salt of gabapentin in liquid or semi-solid dosage form for human and veterinary pharmaceutical use. Tannate salts of active pharmaceutical ingredients are used in sustained release applications and to improve certain organoleptic properties such as taste. The process may utilize either natural or synthetic tannic acid.

60142-96-3, Gabapentin

RL: RCT (Reactant); RACT (Reactant or reagent) (phenolic acid salts of gabapentin in liquid and/or semi-solid dosage forms)

RN 60142-96-3 CAPLUS

CN Cyclohexaneacetic acid, 1-(aminomethyl)- (CA INDEX NAME)

60142-96-3DP, Gabapentin, tannate salts

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(phenolic acid salts of gabapentin in liquid and/or semi-solid dosage forms)

60142-96-3 CAPLUS RN

CN Cvclohexaneacetic acid, 1-(aminomethyl)- (CA INDEX NAME)

REFERENCE COUNT:

48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:803928 CAPLUS

DOCUMENT NUMBER: 141:301481

TITLE: Process for preparing phenolic acid salts of gabapentin

INVENTOR(S):

Kiel, Jeffrey S.; Thomas, H. Greg; Mani, Narasimhan

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 5 pp.

CODEN: USXXCO DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040192617	A1	20040930	US 2004-806022	20040322

WO 2004093866 20041104 WO 2004-US7871 A1 20040316 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2003-457431P P 20030325 The present invention provides a novel process for preparation of the tannate salt of gabapentin for human and veterinary pharmaceutical use. Tannate salts of active pharmaceutical ingredients are used in sustained release applications and to improve certain organoleptic properties such as taste. However, the prior art neither discloses nor suggests the preparation of gabapentin tannate. The process for preparing gabapentin tannate includes the mixing of gabapentin and tannic acid together in the presence of one or more solvents. The method may further include the step of selecting the one or more solvents from a group consisting of purified water, ethanol, glycerin, propylene glycol, diethylether, methylene chloride, acetone, iso-Pr alc. and mixts. thereof. The process may also include the steps of isolating and purifying the tannate salt. This may be accomplished by filtration, drying, centrifugation and

lyophilization. The process may utilize either natural or synthetic

tannic acid. 60142-96-3, Gabapentin

RL: RCT (Reactant); RACT (Reactant or reagent)

(process for preparing phenolic acid salts of gabapentin) 60142-96-3 CAPLUS RN

CN

Cyclohexaneacetic acid, 1-(aminomethyl)- (CA INDEX NAME)

60142-96-3DP, Gabapentin, tannate salts RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(process for preparing phenolic acid salts of gabapentin)

RN 60142-96-3 CAPLUS

Cyclohexaneacetic acid, 1-(aminomethyl)- (CA INDEX NAME) CN

L5 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:803927 CAPLUS

DOCUMENT NUMBER: 141:301480

TITLE: Phenolic acid salts of gabapentin in solid dosage forms and methods of use

INVENTOR(S): Kiel, Jeffrey S.; Thomas, H. Greg; Mani, Narasimhan PATENT ASSIGNEE(S):

SOURCE: U.S. Pat. Appl. Publ., 5 pp.

CODEN: USXXCO DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	ENT :	NO.			KIN		DATE			APPL					D.	ATE		
		2004				A1					US 2 WO 2	004-	8058	06			0040 0040		
		2004				A3					WO 2	004	0501	02		-	0040	310	
			CN, GE, LK, NO, TJ, BW, BY, ES, SK,	CO, GH, LR, NZ, TM, GH, KG, FI, TR,	CR, GM, LS, OM, TN, GM, KZ, FR,	CU, HR, LT, PG, TR, KE, MD, GB,	CZ, HU, LU, PH, TT, LS, RU, GR,	AU, DE, ID, LV, PL, TZ, MW, TJ, HU, CG,	DK, IL, MA, PT, UA, MZ, TM, IE,	DM, IN, MD, RO, UG, SD, AT, IT,	DZ, IS, MG, RU, US, SL, BE, LU,	EC, JP, MK, SC, UZ, SZ, BG, MC,	EE, KE, MN, SD, VC, TZ, CH, NL,	EG, KG, MW, SE, VN, UG, CY, PL,	ES, KP, MX, SG, YU, ZM, CZ, PT,	FI, KR, MZ, SK, ZA, ZW, DE, RO,	GB, KZ, NA, SL, ZM, AM, DK, SE,	GD, LC, NI, SY, ZW AZ, EE, SI,	
	EP	1622	TD,			A2		2006	0208		EP 2	004-	7596	29		2	0040	316	
DD 7.0	D. T. M.		DE,			ΙT					US 2	000	4533	005		- ^	0000	205	
PRIC	KIII	APP	LN.	INFO	. :						WO 2								
AB	tar met	pre nate hods redi	in of	soli use	d do of t	sage hose	for	m, p npns.	roce	arma sses nnat	ceut for e sa	ical pro lts	com duct of a	pns. ion ctiv	of to	gaba hose arma	pent com ceut	in pns. ical	а

Α and certain organoleptic properties such as taste. The process may utilize either natural or synthetic tannic acid.

ΙT 60142-96-3, Gabapentin

RL: RCT (Reactant); RACT (Reactant or reagent)

(phenolic acid salts of gabapentin in solid dosage forms and methods of nse)

RN 60142-96-3 CAPLUS

Cyclohexaneacetic acid, 1-(aminomethyl)- (CA INDEX NAME) CN

IT 60142-96-3DP, Gabapentin, tannate salts

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(phenolic acid salts of gabapentin in solid dosage forms and methods of use)

RN 60142-96-3 CAPLUS

CN Cyclohexaneacetic acid, 1-(aminomethyl)- (CA INDEX NAME)

L5 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:319273 CAPLUS

DOCUMENT NUMBER: 138:326578

TITLE: Process for preparing tannate tablet, capsule or other

solid dosage forms

INVENTOR(S): Kiel, Jeffrey S.; Thomas, H. Greg; Mani, Narasimhan

PATENT ASSIGNEE(S): Kiel Laboratories, Inc., USA SOURCE: U.S. Pat. Appl. Publ., 7 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
US 20030077321 US 7273623		US 2002-269027	20021010
CA 2453256	A1 20031023	CA 2003-2453256	20030226
CA 2469736	A1 20031023	CA 2003-2469736	20030226
WO 2003086356	A1 20031023	WO 2003-US5664	20030226
W: AU, CA, US			
WO 2003086346	A1 20031023	WO 2003-US5667	20030226
W: AU, CA, US			
AU 2003217703	A1 20031027	AU 2003-217703	20030226
AU 2003217704	A1 20031027	AU 2003-217704	20030226
CA 2482013	A1 20040422	CA 2003-2482013	20030409
WO 2004032826		WO 2003-US10918	20030409
WO 2004032826	A3 20040826		
W: CA			
	KG, KZ, MD, RU,		
EP 1622586	A2 20060208	EP 2003-817708	20030409
		GB, GR, IT, LI, LU, NL, S	SE, MC, PT,
	RO, CY, TR, BG,		
		US 2004-505347	
		US 2006-501649	
PRIORITY APPLN. INFO.:		US 2001-328990P P US 2001-282969P P US 2002-119285 A	

US 2002-269027 A 20021010 WO 2003-US5664 W 20030226 WO 2003-US5667 W 20030226 WO 2003-US10918 W 20030409 US 2004-921438 A2 20040819

AB An active pharmaceutical ingredient is combined with tannic acid to form a tannate salt complex of the active ingredient. The active ingredient tannate salt complex without isolation or purification is then blended with pharmaceutically acceptable excipients to form a granulate which is processed into a tablet or capsule to generate a therapeutic solid doage form. For example, tablets were prepared containing carbetapentane tannate 60.0 mg, chlorpheniramine tannate 4.0 mg, phenylephirane tannate 10.0 mg, magnesium aluminum silicate 30.0 mg, Avicel PH 102 499.642 mg, Methocel E-10 M 5.0 mg, corn starch 3.0 mg, calcium phosphate dibasic 10.133 mg, xanthan gum 7.875 mg, talc 2.25 mg, FD&C Red #40 0.85 mg, and magnesium stearate 2.25 mg.

IT 60142-96-3D, Gabapentin, tannate
RI: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of tannate tablet, capsule or other solid dosage forms)

RN 60142-96-3 CAPLUS

CN Cyclohexaneacetic acid, 1-(aminomethyl)- (CA INDEX NAME)

REFERENCE COUNT:

33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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